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ABSTRACT

Surveys of literacy attainment have been going on in the United Kingdom since 1948. The main finding is that literacy standards have changed very little in that time. Among 8-year-olds (children in Year 3) in England and Wales, however, standards fell slightly in the late 1980s, and then recovered in the early 1990s. The few international comparisons available seem to show some slippage in the position of Britain's 9-year-olds between the 1970s and the 1990s, and a "trailing edge" of underachievement. Very few school-leavers and adults can be described as illiterate, but a significant percentage have limited literacy skills. For many people, literacy skills are insufficient to meet the demands of life, work, and citizenship. The British educational system has been generally successful in maintaining the standard of achievement in literacy. The international evidence shows that the levels achieved by middling and high performers are comparable to the best in the world. But international evidence and adult literacy surveys also show that there is a significant proportion of the population who have poor or very poor literacy skills; and this pattern seems to have persisted for many decades. The principal implication for educational policy would seem to be that the most effective way of raising average levels of achievement would be to intervene in the education of children who are already failing or at risk of doing so, to ensure that they are equipped with the literacy (and numeracy) skills necessary for the rest of their education and for life. (Contains 28 references and 7 tables of data.) (RS)

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Trends in Standards of Literacy in the United Kingdom, 1948-1996.

by Greg Brooks

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Trends in standards of literacy in the United Kingdom, 1948-1996

By Greg Brooks, National Foundation for Educational Research (NFER) [1]

Paper presented at UK Reading Association conference, University of Manchester, July 1997, and at British Educational Research Association conference, University of York, September 1997.

Summary

1. Surveys of literacy attainment have been going on in the UK since 1948.
2. The main finding is that literacy standards have changed very little in that time. Among 8-year-olds (children in Year 3) in England and Wales, however, standards fell slightly in the late 1980s, and then recovered in the early 1990s.
3. The few international comparisons available seem to show some slippage in the position of Britain's 9-year-olds between the 1970s and the 1990s, and a 'trailing edge' of underachievement.
4. Very few school-leavers and adults can be described as illiterate, but a significant percentage have limited literacy skills. For many people, literacy skills are insufficient to meet the demands of life, work and citizenship.
5. The British educational system has been generally successful in maintaining the standard of achievement in literacy. The international evidence shows that the levels achieved by middling and high performers are comparable to the best in the world.
6. But international evidence and adult literacy surveys also show that there is a significant proportion of the population who have poor or very poor literacy skills; and this pattern seems to have persisted for many decades.
7. The principal implication for educational policy would seem to be that the most effective way of raising average levels of achievement would be to **intervene early in the education of children who are already failing or at risk of doing so, to ensure that they are equipped with the literacy (and numeracy) skills necessary for the rest of their education and for life**.

Introduction

National surveys of performance in reading have been going on in the UK since 1948, and surveys of performance in writing since 1979. The aim of this paper is to summarise the evidence from those surveys on the trend of literacy attainment up to 1996, and to draw some inferences from the findings.

National surveys of schoolchildren, 1948-1996

Children aged 11 and 15/16 (Years 6 and 11) in England and Wales, 1948-79

These are the two ages for which there is most evidence: see Table 1. (2)

Table 1: NATIONAL SURVEYS OF SCHOOLCHILDREN'S LITERACY ATTAINMENT IN YEARS 6 AND 11 IN ENGLAND AND WALES, 1948-88

Dates	Test(s) used
1948/52/56/61/64/70-71	Watts-Vernon
1955/60/70-71/76*/79	National Survey 6 (NS6)
1979/80/81/82/83/88	Assessment of Performance Unit (APU) Language Monitoring Project tests

Key: * = Year 6 only; otherwise all these surveys covered both age groups.

Notes:
(1) Watts-Vernon and NS6 were reading tests; the APU surveys covered both reading and writing.
(2) The APU surveys of 1979-88 also covered Northern Ireland.
(3) For pre-APU surveys, see the summaries in Gorman *et al.* (1981, 1982); and for APU surveys, see Gorman *et al.* (1988, 1991) and references cited there.

Ages 11 and 15/16 were targeted in all the earliest surveys, and in many later ones, as being, generally, the last year of primary education and the last year of compulsory education respectively. The survey findings could therefore be seen as estimates of the effectiveness of primary and secondary schooling. The surveys of 1948-76 were conducted either by HM Inspectorate or by NFER, and covered only *reading*, as being easier to test than other aspects of language, and fundamental to much of the curriculum.

The tests used-(Watts-Vernon and NS6) were multiple-choice sentence-completion tests. When first developed (in 1938 and 1955 respectively) they were considered state-of-the-art, but by the time they were last used (in 1971 and 1979 respectively) had come to seem both out of date (for example, an item in NS6 used the word 'mannequin') and to under-represent the complex nature of reading and its uses, not to mention other aspects of language.

However, for the period 1948-76 the results from these tests are the only national monitoring survey information available for England and Wales. The results can be summed up as follows:

- the average reading score rose slightly between 1948 and 1952; this improvement was widely attributed to a recovery in the education system after the war years;

- average reading scores then remained essentially unchanged from 1952 to 1979.

Children aged 11 and 15/16 (Years 6 and 11) in England, Wales and Northern Ireland, 1979-88

In these years the APU Language Monitoring Project based at NFER carried out six surveys at each of these ages. These covered both *reading and writing*, and Northern Ireland as well as England and Wales. The tests were all developed especially for the surveys, and attempted to present authentic literacy tasks. For the purposes of estimating trends over time, the surveys of 1979, 1983 and 1988 in particular contained common tests, and the findings from these are summarised in Table 2.

Table 2: Changes in literacy in England, Wales and Northern Ireland, 1979-88

		Year 6	Year 11
Reading	1979-83	Slight rise	Slight rise
	1983-88	Slight rise	No overall change
Writing	1979-83	Slight rise	No overall change
	1983-88	Slight fall	No overall change

Some findings for *spelling* were obtained in 1991/92 from samples of APU writing tasks undertaken by Year 6 pupils in 1979 and 1988, and by Year 11 pupils in 1980 and 1983 (Brooks, Gorman and Kendall, 1993). For the tasks examined an improvement in the performance of Year 6 pupils occurred, and the performance of those in Year 11 remained the same.

Reading attainment in Welsh of children aged 11 (Year 6), 1978-84

During the late 1970s and into the 1980s, the Welsh Office commissioned surveys of various aspects of attainment in the Welsh language. The only valid comparison over time available, however, is the following. Pupils in Year 6 were tested on *reading* in Welsh in 1978 and 1984. The samples were similar in the two surveys, and the tests included 30 items common to both occasions. The results showed a small but significant rise, both amongst pupils speaking Welsh as a first language and amongst those learning it as a second language (Price, Powell and Griffith, 1987).

Children aged 8, 11, 14 and 15/16 in Northern Ireland, 1987-96

The APU was abolished in 1990, and since then no national monitoring surveys funded by central government have taken place in England and Wales. However, in 1993 Northern Ireland became the first of the three countries in which the APU had operated to re-institute a government-funded monitoring programme. Two surveys of *reading* performance have been mounted by NFER in Northern Ireland, in 1993 and 1996 (Brooks *et al.*, 1995; Brooks, Cato *et al.*, 1997). The ages tested were 8, 11 and 14 on both occasions, and 15/16 in 1993 only. The tests used at age 8 (and one of those used at age 11 in 1993) were taken from the *Reading Ability Series*, and comparisons over time could be made from the standardisation of that series in 1987, and from the use of level A of the series in England and Wales in 1991 (see below). Otherwise, tests from the 1988 APU surveys were re-used. Because of sampling difficulties in 1993, the results for age 14 did not provide reliable evidence on the trend at that age between then and 1996. The results for the other ages are summarised in Table 3. They continue the picture of 'not much change' given by the results already cited.

Table 3: Changes in reading attainment in Northern Ireland, 1987-96

Age		
8	1987/91-93	no change
	1993-96	no change
11	1987/88-93	no change
	1993-96	rise
15/16	1988-93	no change

Children aged 8 (Year 3) in England and Wales, 1987-95

Some monitoring surveys have been carried out in England and Wales since the abolition of the APU, though not funded by central government, and in Years 3 and 4 rather than the traditional Years 6 and 11. In 1991, a survey of the *reading* attainment of pupils in Year 3 was mounted by NFER using level A of the *Reading Ability Series* and taking the 1987 standardisation of that test as the baseline (Gorman and Fernandes, 1992). In 1995, the Consortium of Local Education Authorities, on behalf of the LEAs of England and Wales, commissioned NFER to repeat the exercise (Brooks, Schagen *et al.*, 1997, in press). The results were:

- between 1987 and 1991, the average score fell by 2.5 standardised score points, which is equivalent to about six months of reading age, and therefore definitely an educationally as well as statistically significant decline;

- between 1991 and 1995, the average score rose again by almost exactly the same amount, so that the 1995 average was almost identical to that for 1987.

The change between 1987 and 1991 was one of the very few reliably recorded falls during the entire period covered by this article. Two significant aspects of the educational scene between 1987 and 1991 were that

the National Curriculum was introduced, and

the proportion of teachers in primary schools leaving their job during a year increased sharply, from 9 per cent in 1987 to a peak of 14 per cent in 1990, the second largest group of leavers being those taking early retirement.

The National Curriculum broadened the curriculum for early years, and in practice meant that **less** time was given to literacy. Simultaneously, the departure of an unusually large number of teachers from the profession may have led to a drop in the overall effectiveness of teaching. Both factors may have contributed to the fall observed between 1987 and 1991 (Dean, 1996).

Between 1991 and 1995, both factors eased. The National Curriculum was revised, was no longer so crowded, and became more familiar to teachers, especially in Key Stage 1. Also, teacher turnover fell, and in 1993 was just under 8 per cent. This might be enough to account for the return of average reading performance in Year 3 to the 1987 level by 1995.

However, the impact of lower achievement may be longer-lasting. The cohort of pupils who were tested at age 8 in 1991 entered Year 7, and therefore in most cases secondary school, in September 1994. In that school year some members of the Secondary Heads Association (SHA) thought they had begun to notice a fall in the test scores of pupils entering their schools, and therefore in September 1995 SHA carried out a poll of its members. Most of those responding thought that entry test scores had declined, and could cite test results to that effect. This survey was not systematic or representative, because those who had concerns were more likely to respond. But since several hundred, albeit self-selecting, secondary headteachers had concerns and evidence about declining entry test scores, this may indicate a valid trend. Further evidence on this may emerge from the 1998 and 1999 Key Stage 3 assessments, and/or from the GCSE results for the years 2000-01.

Children aged 9 (Year 4) in England and Wales, 1996

In 1996 the Esmée Fairbairn Charitable Trust funded NFER to mount a national *reading* survey in Year 4 (Brooks, Pugh and Schagen, 1996). This study contained an international aspect which will be

discussed below; for the national aspect it used level B of the *Reading Ability Series*. This was a mini-longitudinal study, since most of the children who were tested had also taken part in the Year 3 survey in 1995. The results showed that the children had made slower progress in the intervening 12 months than would have been expected from the 1987 standardisation.

Children in Scotland, 1953-63 and 1978-95

In keeping with the distinctiveness of its education system generally, Scotland's monitoring surveys have almost always been separate from those in the rest of the UK. Two early surveys of English and arithmetic were carried out in 1953 and 1963, using the same tests on both occasions (Scottish Scholastic Survey, 1968). The age group tested was 10-year-olds (Year 5). The English test was in two parts, Usage (prepositions, tenses, spelling, punctuation) and Comprehension (*reading*), and both parts showed a substantial rise in the average score. No further monitoring was carried out in Scotland for 15 years.

In the late 1970s Scotland re-established a monitoring system, with surveys of the *reading* attainment of children aged 9 and 12 (Years 4 and 7) in 1978 and 1981 (Neville, 1988). The common instruments were levels of the *Edinburgh Reading Test*. Then in 1983 the Assessment of Achievement Programme (AAP) was established specifically to carry out monitoring surveys (in English, mathematics and science, in a regular cycle) using specially-designed instruments, and this programme continues to operate. To date, it has carried out four cross-sectional surveys of *reading and writing* in Years 4, 7 and 9 (P4, P7, S2) in 1984, 1989, 1992 and 1995 (Scottish Office Education (and Industry) Department, various dates) and it is planned that thereafter the surveys will also become longitudinal, that is, the pupils tested in Year 4 in 1995 will be re-tested in Year 7 in 1998, etc. The results for 1978-1995 are summarised in Table 4.

Table 4: Changes in literacy in Scotland, 1978-95

		Year 4 (P4)	Year 7 (P7)	Year 9 (S2)
Reading	1978-81	Slight rise	No change	(Not tested)
	1981-84	Slight fall	No change	(Not tested)
	1984-89	No change	No change	Slight rise
	1989-92	No change	No change	No change
	1992-95	Slight fall	Slight fall	Slight fall
Writing	1984-89	No change	No change	Slight rise
	1989-92	Slight fall	No change	Slight rise
	1992-95	Rise	Rise	Slight fall

General conclusion on trends over time in literacy of schoolchildren in the UK

For all aspects of schoolchildren's literacy the absolute size of the changes was small; the size of the samples ensured that even fairly small changes were statistically significant. The major feature of the results throughout the UK is their great stability over time; most comparisons reveal no change, a few show a rise, even fewer show a fall. Fastening on isolated instances of a fall in average scores is to misrepresent the facts; and there is certainly no warrant for doom-laden pronouncements of inexorable decline.

International surveys of schoolchildren, 1960-91/96

To date, there have been four international comparative studies of schoolchildren's literacy attainment,

three on reading comprehension (1960, 1971, 1991, with a fourth being planned for 1999/2000), and one on written composition (1983). All four were carried out by the Internaional Association for the Evaluation of Educational Achievement (IEA). There are obvious problems in attempting these comparisons: countries differ widely in levels of development, etc., the test questions are likely to suit some countries more than others, translation can affect the levels of difficulty posed by specific questions, and comparable samples of pupils are very difficult to achieve because of the different features of education in the participating countries. The studies are also intermittent and the same countries do not always take part, so that monitoring changes in comparative differences is not easy. Despite these drawbacks, there have been some interesting findings.

International study of written composition, 1983

Children aged 13/14 (Year 9) in England and Wales took part in this study, and in Wales writing in both English and Welsh was studied (Gubb, Gorman and Price, 1987). Much of interest about the details of children's writing attainment, and about the difficulties of international comparisons, was reported. However, no data were given from which comparative rankings could be calculated (Gorman, Purves and Degenhart, 1988). Also, this was a one-off study, and it offers no basis for estimating trends over time.

International studies of reading comprehension, 1960, 1971, 1991(1996)

The first of these studies covered only children aged 13/14 (Year 9); the second covered ages 9, 13/14 and 15/16 (Years 4, 9 and 11); the third covered ages 9 and 13/14 (Years 4 and 9). England and Wales, and Scotland, took part in 1960 and 1971. In 1991, no part of the UK participated - but in 1996 England and Wales belatedly used the 1991 age 9 test in the Year 4 study (reported above) alongside level B of the *Reading Ability Series* (Brooks *et al.*, 1996).

Because different tests were used on each occasion, the survey results do not permit calculation of trends over time. However, some findings of interest emerge from the ranking data, and from the distribution of scores. Though there were problems of sampling in some countries, the 1960 study placed the 12 participating countries in the following order: Yugoslavia, Scotland, Finland, England and Wales, United States, Switzerland, West Germany, Sweden, France, Israel, Belgium, Poland (Foshay, 1962). The 1971 study produced the following rank orders for the three ages involved (Thorndike, 1973):

Age 9	13/14	15/16
Sweden	New Zealand	New Zealand
Italy	Italy	Scotland
Finland	United States	England & Wales
England & Wales	Belgium (French-speaking)	Netherlands
Scotland	Finland	Finland
Belgium (French-speaking)	Scotland	Belgium (French-speaking)
Netherlands	Sweden	Sweden
Belgium (Flemish-speaking)	Hungary	Israel
United States	England & Wales	Belgium (Flemish-speaking)
Hungary	Netherlands	Italy
Israel	Belgium (Flemish-speaking)	Hungary
Chile	Israel	United States
India	Chile	Chile
Iran	Iran	Iran
	India	India

And, with the 1996 result for England and Wales inserted, the 1991 study produced the following rank order for age 9 - it should be noted that in this list the countries between the two horizontal lines were not statistically significantly different from England and Wales, while those above the upper line were significantly better, and those below the lower line were significantly worse, than England and Wales (Elley, 1992):

Finland
United States
Sweden
Italy
France
New Zealand
Norway
Singapore
Iceland
Ireland
Canada (British Columbia)
Hong Kong
Switzerland
Greece
Germany (West)
England & Wales (1996)
Belgium (French-speaking)
Hungary
Germany (East)
Spain
Slovenia
Netherlands
Cyprus
Denmark
Portugal
Trinidad & Tobago
Indonesia
Venezuela

These rankings are inherently not very reliable, but do seem to indicate relatively high placings for England and Wales, and Scotland, in the earlier studies, and some slippage for England and Wales at age 9 by the 1990s.

Inspection of the distribution of scores reveals another point of interest. Even in the 1960 study it was noted that England and Wales had 'by far the largest dispersion of test scores' (Pidgeon, in Foshay, 1962, p.59), with Scotland close behind. In the 1971 study, the standard deviations for England and Wales, and Scotland, were among the largest at ages 9 and 13/14 (though not at age 15/16). And in the 1991/96 study the distribution of scores for England and Wales had a noticeable 'long tail' or 'trailing edge': whereas in the middle and upper parts of the range children in England and Wales performed as well as those in countries much higher in the rank order (including Finland, which was top), those at the lower end did much worse. Among industrialised western countries only Denmark had a similar (in fact, worse) trailing edge.

Pidgeon had a theory on this in 1962: 'The general aim of the grade class teacher may tend to result in a relatively smaller dispersion. Perhaps exerting a greater influence, however, is the belief a teacher may have that innate ability is of paramount importance in determining the level of atttainment to be expected from a child. Streaming by ability, which is viewed as an administrative device resulting from the acceptance of this belief, will merely tend to enhance its effects. When all these factors act in the

same direction the effect will clearly be greatest and this is what happens in England. Here, it is claimed, the aims and, more especially, the beliefs of most teachers and educational administrators lead them to expect wide differences in performance, and this is what is therefore achieved. Where, on the the other hand, the grade placement system operates and especially where, within such a system, teachers do not attempt to measure innate ability and therefore do not expect their pupils' attainments to be matched to it, then the dispersion of achievement will be much less' (Pidgeon, in Foshay, 1962, pp.61-62). In other words, low expectations of some children contribute to their low achievement; and in this respect very little seems to have changed in British education. If this expectation effect is true, it would seem to imply a 'devil take the hindmost' attitude, possibly rooted in Britain's class structure, and a need to counteract this by concentrating special help on those most in need.

National and international surveys of adults in England, Wales and Scotland, 1972 and 1991-96

There have been six national performance surveys of the literacy attainments of adults in one or more of the countries of the UK, one in 1972 and the rest in the 1990s - see Table 5.

The most recent survey was the UK part of an international study. The 1991-92 and 1993-94 surveys used the same tests; the two 1995 surveys used the same tests (which were, however, different from those used in 1991-94). The countries covered differed between surveys, and the ages sampled and sampling methods varied considerably. Indeed, the report on the most recent survey claims that it 'is the first to be carried out in Britain on a national random probability sample of adults of working age' (Carey *et al.*, 1997, p.13), with the explanation in a footnote that the previous surveys 'were based on cohort studies or did not use probability sampling at all stages of the sample design' (*ibid.*, p.17). Therefore these studies provide little basis for estimating trends over time. However, they do provide interesting data on attainment levels of adults of different ages, especially the proportions with literacy difficulties.

The 26-year-olds who formed the sample for the 1972 survey and took the Watts-Vernon reading test then had also taken that same test in 1961 when they were aged 15. *This is the only piece of genuinely longitudinal evidence available from all the surveys cited in this article* (with the minor exception of the 1995-96 study of children moving from Year 3 to Year 4). The results showed 'a substantial general increase in reading scores' over the 11-year gap, and an illiteracy rate 'as low as one per cent'. 'Illiteracy' was defined here as a score of 11 or less on the 35-item test; the corresponding 'illiteracy rate' for these same people at age 16 had been 3.5 per cent.

Table 5: NATIONAL SURVEYS OF ADULT LITERACY IN BRITAIN, 1972 and 1991-96

Year	Ages covered	Countries	Tests used
1972	26 (NSHD)	England, Wales, Scotland	Watts-Vernon
1991-92	21 (BCS70)	England, Wales, Scotland	ALBSU tests
1993-94	22-24, 32-34, 42-44, 52-54, 62-64, 72-74	England, Wales	ALBSU tests
1995	37 (NCDS5)	England, Wales	BSA/NFER tests
1995	16-64	Wales	BSA/NFER tests
1996	16-65 (IALS)	England, Wales, Scotland, (N. Ireland)	OECD tests

Key: ALBSU = Adult Literacy and Basic Skills Unit, now known as the Basic Skills Agency
BCS70 = British Cohort Study 1970, a longitudinal study of people born in Britain in a week in April 1970
BSA = Basic Skills Agency, previously known as the Adult Literacy and Basic Skills Unit
IALS = (First) International Adult Literacy Study
NCDS5 = The fifth 'sweep' of the National Child Development Study, a longitudinal study of people born in Britain in April 1958
NSHD = National Survey of Health and Development, a longitudinal study of people born in Britain in a week in
OECD = Organisation for Economic Cooperation and Development

Notes:
(1) Though three of the surveys mentioned were part of longitudinal studies, only the 1972 survey contained a lon literacy assessment - see text.
(2) The tests referred to as 'BSA/NFER tests' were research instruments developed for the BSA by NFER.
(3) The 1996 results for Northern Ireland were not available at the time of writing.
(4) All these surveys covered *reading*; only the two 1995 surveys also covered *writing*.

Table 6: ESTIMATES OF ILLITERACY AND FUNCTIONAL ILLITERACY RATES FROM ADULT LITERACY SURVEYS IN BRITAIN, 1972-96

Year	Illiteracy rate	Illiteracy definition rate	Functional illiteracy definition	
1972	1%	less than 11/35 on WV test		
1991-2	1%	zero on test	13%	below BSA Foundation level
			19%	below BSA level 1
1993-4			4%	below BSA Foundation level (varied from 2% to 11% across age groups)
			15%	below BSA level 1 (varied from 7% to 19% across age groups)
1995 (age 37)			6%	less than 16/23 on test (= approx. below BSA Foundation level)
			19%	less than 19/23 on test (= approx. below BSA level 1)
1995 (ages 16-64)			6%	less than 16/23 on test (= approx. below BSA Foundation level)
			16%	less than 19/23 on test (= approx. below BSA level 1)
1996			23%	IALS level 1 (= scaled score of below 226/500, or approx. below BSA level 1)

Key: BSA = Basic Skills Agency
IALS = (First) International Adult Literacy Survey

Note: For definitions of BSA and IALS levels, see the reports.

Subsequent surveys in the 1990s also provide or allow estimates of the proportion of adults who are illiterate and/or have such poor literacy skills that they are unable to function effectively in life or work or as citizens, and these estimates are tabulated in Table 6, together with the definitions on which they are based.

These quite varied estimates show how difficult it is to achieve agreement on such matters, sometimes even when the same test is used and the same criterion is employed - see the 1991-92 and 1993-94 studies. However, two tentative inferences from the adult literacy data may be justified. In Table 4, against the 1993-94 survey, it is noted that the proportion of adults with very low literacy skills varied across age groups. The pattern was that this proportion was lowest for 32- to 34-year-olds (with the

proportion for 22- to 24-year-olds only slightly higher), then increased slowly but steadily with age. The highest proportion with poor skills was among 72- to 74-year-olds - these are people who were born in 1919-21 and entered school in 1924-26. A very similar pattern is discernible in the subsequent cross-age studies (1994 in Wales, 1996 throughout Britain).

To investigate this pattern further, a re-analysis of the data from the 1993-94 study was carried out, in order to estimate the average score on the test of the six cohorts involved. The results were as shown in Table 7.

Table 7: AVERAGE LITERACY SCORES OF COHORTS OF ADULTS IN BRITAIN, 1993-4

Age	Average score
22-24	3.53
32-34	3.64
42-44	3.65
53-54	3.41
62-64	3.30
72-74	3.12

Table 7 shows a slight increase from 22- to 24-year-olds to 32- to 34-year-olds, then a short plateau, then a slow decline, or essentially the same pattern as the proportion with poor skills.

By itself, this pattern could have either of two explanations (or, indeed, a mixture of the two):

- people's literacy skills do not materially alter once they leave school, and any earlier survey would therefore have found much the same cross-sectional pattern; or

- people's literacy skills do alter after they leave school, improving into early middle age, then remaining steady for some time, before declining again in later years.

The only piece of evidence that hints at a decision between these explanations is the longitudinal 1961-72 study, which seems to show that average literacy skills do improve into early middle age. This suggests that the second, 'lifetime trend', explanation is the more likely.

The adult literacy literacy data therefore offer two possible further inferences:

- *the average level of literacy attainment may be subject to a rising, then falling, trend over people's lifetimes.*

- whatever the truth of that, *the tendency of a significant proportion of the population to have low literacy skills is not a recent phenomenon, but dates back at least to the generation who entered school around 1925.*

Overall conclusions

The British educational system has been generally successful in maintaining the standard of achievement in literacy despite economic cycles, the rise in numbers having a first language other than

English, the spread of other sources of information and entertainment, and the substantial broadening of the school curriculum. The international evidence seems to show that the levels achieved by middling and high performers are comparable to the best in the world.

But the international evidence and the results of surveys of adult literacy also show that there is a significant proportion of the population who have poor or very poor literacy skills; and this pattern seems to have persisted for many decades.

The principal implication for educational policy would seem to be the following. The most effective way of raising average levels of achievement would be to **intervene early in children's lives to ensure that those already failing or at risk of doing so are equipped with the literacy (and numeracy) skills necessary for the rest of their education and for life**.

Note (1):

Standards In Literacy And Numeracy by Derek Foxman, Tom Gorman and Greg Brooks was published by the National Commission on Education as Briefing no.10 in December 1992, and reprinted in Paul Hamlyn Foundation/ National Commission on Education (1993) *Briefings*. London: Heinemann, 135-150; and in B. Moon and A. Mayes (eds) (1994) *Teaching and Learning in the Secondary School*. London: Routledge for the Open University, 337-347. A first update was published in *TOPIC*, issue no. 13 (Spring 1995), item 1, and a second as G. Brooks, D. Foxman and T.P. Gorman (1995) *Standards in Literacy and Numeracy: 1948-1994*. (NCE Briefing, new series, no.7) London: National Commission on Education. This paper is a further update on the literacy data.

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